

Title (en)

ACTUATOR-ASSISTED POSITIONING SYSTEMS AND METHODS

Title (de)

AKTUATORASSISTIERTE POSITIONIERUNGSSYSTEME UND -VERFAHREN

Title (fr)

SYSTÈMES ET PROCÉDÉS DE POSITIONNEMENT ASSISTÉ PAR UN ACTIONNEUR

Publication

**EP 3716311 A1 20200930 (EN)**

Application

**EP 20163637 A 20200317**

Priority

US 201916368566 A 20190328

Abstract (en)

A positioning system can include a guide, a carrier element configured to engage and convey a workpiece, a motor having a mover element, a restraint coupled to the carrier element, and an actuator disposed between the restraint and the carrier element. The guide can be movable relative to a horizontal reference plane such that the carrier element coupled to the guide is inclined with respect to the horizontal reference plane. At least the mover element of the motor can be coupled to the carrier element and can be configured to move the carrier element along the guide. The restraint can be configured to selectively engage the guide to restrain movement of the carrier element in at least one direction along the guide when the guide is inclined out of the horizontal reference plane. The actuator can be configured to displace the carrier element relative to the restraint along the guide when the restraint is engaged with the guide.

IPC 8 full level

**H01J 37/20** (2006.01); **B23Q 1/25** (2006.01); **G03F 7/20** (2006.01); **H01L 21/68** (2006.01)

CPC (source: CN EP KR US)

**H01J 37/20** (2013.01 - CN EP KR US); **H01J 37/28** (2013.01 - KR US); **H01L 21/67011** (2013.01 - CN); **H01L 21/68** (2013.01 - CN); **H01J 2237/20264** (2013.01 - EP US); **H01J 2237/20278** (2013.01 - EP); **H01J 2237/20285** (2013.01 - US); **H01J 2237/20292** (2013.01 - CN)

Citation (search report)

- [A] US 2014312246 A1 20141023 - TAKAHASHI MOTOHIRO [JP], et al
- [A] US 2004099492 A1 20040527 - ONUKI KATSUHIRO [JP], et al
- [A] US 2014061159 A1 20140306 - ASAHATA TATSUYA [JP], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3716311 A1 20200930**; CN 111755304 A 20201009; CN 111755304 B 20220927; KR 102462969 B1 20221103; KR 20200115350 A 20201007; US 10825646 B2 20201103; US 2020312605 A1 20201001

DOCDB simple family (application)

**EP 20163637 A 20200317**; CN 202010229849 A 20200327; KR 20200037516 A 20200327; US 201916368566 A 20190328